



## Nipomo Community Services District TURF REPLACEMENT REBATE PROGRAM How To Kill A Lawn

The following information is without guarantee of any kind. You are urged to look up your own resources (many are available on the internet) to ensure the method you use is the best one for you and your landscape.

The first part of the actual process of turning a lawn into a beautiful, drought-tolerant garden is to get rid of the lawn. There are many approaches to killing a lawn, and the choice will be dependent on the budget, the physical capabilities of the people doing the conversion, the type of lawn to be removed, and the nature and location of the surrounding plants to be saved.

There are five basic approaches to getting rid of a lawn:

1. **Mechanical.** Hacking, digging, chopping, rototilling, and other mechanical methods of mass lawn destruction.
2. **Sheet mulching.** Layer newspapers or other light-occlusive material on the area of lawn targeted for removal. This is usually done over winter. Rototilling will be much easier, and there will be less chance of the lawn resprouting, after sheet mulching. In addition, the mulch for rototilling is already there.



3. **Solarization.** Done during the summer, this approach uses solar energy to kill plants, weeds, pests (including nematodes and other soil-borne pests and pathogens), and seeds by applying a layer of black polyethylene sheet plastic over the area of lawn to be killed. Before applying the plastic, mow and irrigate the lawn. The plastic remain intact, without holes. It is important to place soil or other material over the edges of the plastic to increase the heat load. It usually takes 6 to 8 weeks in summer to effect kill. This will kill all roots up to about 4 to 5 inches from the surface.

4. **Herbicides.** Preemergent (to kill sprouting seeds), postemergent (to kill grass plants), nonselective (glyphosate – RoundUp), and herbicides that targeting *Poa* grass species.
5. **Hire someone to remove the lawn.** This is the easiest way to remove a lawn, but you still have to ensure it is done in a way that produces the least harm to the other plants in the area of the lawn and leaves you with soil that is free of seeds and potential grass plants.



There are issues with all of these approaches. Here are some things to consider.

**Herbicides and other chemicals.** Thoroughly review the University of California Pesticide Notes (attached) before working with chemical herbicides or pesticides.

When herbicides and other chemicals are used, safety measures should be taken to ensure the applicator is not exposed to the chemical, and secondary exposure from the applicator's clothing, shoes and tools does not occur to others, especially small children and pets. Err on the side of caution.

Chemicals should never be allowed to run off the intended application site, especially into gutters, storm drains, or other ways in which the chemical can enter streams and other bodies of water.

**Strategies for avoiding incomplete removal of plant material capable of growing weeds/lawn.** If you have a stoloniferous (spreads by runners) grass in your lawn (i.e., kikuyugrass, Bermudagrass), rototilling, digging, or any other mechanical methods without first having killed the grass may result in many new grass plants in your new garden. A small piece of the runner can root and spread.

Soil can have a substantial “seed bank” (the reservoir of viable seeds in the soil). Some soils have more of a seed bank than other soils. Land once used as pasture can have an impressive seed bank. Many species' seeds can remain viable for a very long time in the soil. Most weed seeds will not sprout unless they are close to the surface. If you properly kill the lawn, rototill it once to work in soil amendments, use a preemergent herbicide –OR- irrigate and then pull the weeds that sprout, the bank of seeds close enough to the surface to sprout should be very limited. However, every time you disturb the soil, weed seeds may be brought to the surface. If you dig a hole for planting, and then, once the plant is in the ground, cover the soil with two inches or more of weed-free mulch, there should be very few sprouting weeds (most weed seeds need sunlight to sprout).

**Avoiding unintended harm to other plants.** When glyphosate (RoundUp) is used, there is a risk of killing other plants. To decrease the risk of harm to other plants, only apply glyphosate during sunny days without wind. Glyphosate is activated by sunlight, and is not effective in shade. It can take 10 days to kill plants. When you spray, protect non-target plants by barriers, such as a large sheet of cardboard. Wear safety goggles and a respirator mask that covers mouth and nose. When finished, thoroughly clean equipment, masks, clothing and shoes. Do not wear contaminated clothing into the house. Do not pick up children or pets while wearing the contaminated clothing.

If you use a preemergent herbicide, it will kill all sprouting seeds. Avoid using preemergent herbicide where seeds will be planted.

Thoroughly review the University of California Pesticide Notes (attached) before working with chemical herbicides or pesticides.

If there are trees or shrubs with roots in the area of lawn removal, be careful not to injure them too badly. Removing the lawn will be a major change in a tree's environment, as will going from four-times-weekly irrigation to once-weekly or once-monthly irrigation. If possible, remove the lawn in stages so that the tree has a chance to adapt to the new environment a little at a time.

**Errata.** Mechanical methods can be hard on a gardener's body. Avoid doing too much the first day until you see how your body reacts to the physically demanding work.

If you remove the grass by digging under it and removing it in large sheets, it will need disposal. If it is not stoloniferous grass, and you have the space, it can be composted.



<http://www.ipm.ucdavis.edu/PMG/PESTNOTES/warning.html>

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## **Warning on the Use of Chemicals**

Pesticides are poisonous. Always read and carefully follow all precautions and safety recommendations given on the container label. Store all chemicals in the original labeled containers in a locked cabinet or shed, away from food or feeds, and out of the reach of children, unauthorized persons, pets, and livestock. Consult the pesticide label to determine active ingredients and signal words.

Pesticides applied in your home and landscape can move and contaminate creeks, lakes, and rivers. Confine chemicals to the property being treated and never allow them to get into drains or creeks. Avoid drift onto neighboring properties, especially gardens containing fruits or vegetables ready to be picked.

Do not place containers containing pesticide in the trash or pour pesticides down sink, toilet, or outside drains. Either use the pesticide according to the label until the container is empty, or take unwanted pesticides to a Household Hazardous Waste Collection site. Contact your county agricultural commissioner for additional information on safe container disposal and for the location of the Hazardous Waste Collection site nearest you. Dispose of empty containers by following label directions. Never reuse or burn the containers or dispose of them in such a manner that they may contaminate water supplies or natural waterways.

## **More information about using pesticides**

### **Safe Use and Disposal of Pesticides**

<http://www.ipm.ucdavis.edu/QT/gardenchemicalscard.html>

### **Pesticides: Safe and Effective Use in the Home and Landscape**

<http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn74126.html>

### **Pesticides and Water Quality**

<http://www.ipm.ucdavis.edu/WATER/U/index.html>